RTIP ID# (required) ORA000193

TCWG Consideration Date: April 22, 2008

Project Description (clearly describe project)

The State Route 22 West Orange County Connection Phase II (SR-22/WOCC Phase II) project will add High Occupancy Vehicle (HOV) bridge structures to provide direct freeway-to-freeway HOV lane connectors at the SR-22/I-405 and I-405/I-605 interchanges. The HOV lane direct connectors will allow the HOV system to accommodate long distance travel for carpools and buses, while enabling the smooth flow of vehicles between freeways to avoid chokepoints at these major interchanges. The WOCC Phase II project will also add an HOV lane in each direction on I-405/SR-22 (on the freeway section between the SR-22/I-405 and I-405/I-605 HOV lane direct connectors) to safely accommodate traffic movements in and out of the HOV lanes within the project area.

A Final Environmental Impact Report/Environmental Impact Statement (FEIS/EIR) was prepared and adopted for the project (for both Phases I and II) and the Record of Decision was issued by the Federal Highway Administration (FHWA) in 2003. The FEIS/EIR included a determination that the project would not cause PM_{10} hot spots and is <u>not</u> a project of air quality concern for PM_{10} emissions. Construction of Phase I of the SR-22 WOCC project is nearly complete and the current Phase II project area is the only portion of the project that currently requires a conformity determination for $PM_{2.5}$ emissions.

Type of Project (use Table 1 on instruction sheet)

Change to existing state highway

County Orange

Narrative Location/Route & Postmiles:

- SR-22 from the east side of the Valley View St interchange to just west of the I-405/I-605 junction: 12 ORA-22 PM 1.2/0.66;
- I-405 from SR-22 junction to I-405/I-605 junction: 12 ORA-405 PM 20.56/23.98; and
- I-605 from I-405 junction to Katella Avenue: 12 ORA-605 PM 0.0/1.0.

Caltrans Projects – An Environmental Re-Evaluation/Addendum is currently being prepared (**EA#'s 071631 and 071621**) that addresses the Final EIR/EIS that was approved for the project in 2003 (EA#'s 071630 and 071620).

Lead Agency: Orange County Transportation Authority

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Hot Spot Pollutant of Concern (check one or both) PM2.5 X PM10

Federal Action for which Project-Level PM Conformity is Needed (check appropriate box)

Categorical Exclusion (NEPA)

EA or FONSI or X PS&E or Construction

The construction of the construction

Scheduled Date of Federal Action: July 2008 (estimated date for FHWA air quality conformity determination)

NEPA Delegation – Project Type (check appropriate box)

Section 6004 – X Section 6005 – Non-Categorical Exemption

Current Programming Dates (as appropriate)								
	PE/Environmental	ENG	ROW	CON				
Start	Final EIS/EIR adopted in 2003	October 2007	November 2008	March 2010				
End	Environmental Re- Evaluation/Addendum (internal documentation) to be completed in Summer 2008	June 2009	June 2009	Sept. 2013				

Project Purpose and Need (Summary): (attach additional sheets as necessary)

The purpose of the SR-22/WOCC Phase II project is to improve both existing and future mobility and enhance safety throughout the transportation corridor while minimizing environmental and economic impacts. Under existing conditions, the project area experiences high levels of congestion, high accident rates, and reduced travel speeds which are a result of several contributing factors. With projected population and employment growth trends indicating increased transportation volumes, this situation is expected to worsen. Key areas of concern in the project area are: 1) the lack of continuity between HOV and non-HOV facilities; 2) inadequate weaving distances along the freeway due to the close proximity of on/off-ramps and freeway-to-freeway mainline connectors along the mainline; and 3) there is little incentive or opportunity for individual drivers to switch from single-occupancy vehicles (SOVs) to carpooling or transit without dedicated facilities for this purpose.

The project seeks to accomplish the following goals:

- Improve mobility and reduce congestion in the SR-22/WOCC study area
- Maximize cost-effectiveness of the SR-22/WOCC improvements
- Minimize adverse and maximize beneficial environmental impacts to SR-22/WOCC communities
- Minimize negative and maximize positive economic impacts to SR-22/WOCC communities

Currently, the project area has insufficient capacity on both the freeway and major adjacent surface streets to handle existing and projected future travel demand through the project area. Prior to the recent construction of HOV lanes on the SR-22 freeway (between SR-55 and Valley View Street) as part of the SR-22/WOCC Phase I project, the SR-22 corridor was a missing link in the Orange County HOV system. The SR-22/WOCC Phase II improvements would provide for HOV system continuity and connectivity, tying to I-605 and I-405, thereby helping to improve congestion locally. The traveling public has little incentive or opportunity to switch from single-occupancy vehicles (SOVs) to carpooling or transit without dedicated facilities for this purpose. That is, if SOV drivers cannot decrease their commute times because there are missing links in the HOV system, they are more likely to forego carpooling or using transit in favor of driving alone.

The SR-22/WOCC Phase II project would provide connectivity for the HOV system while meeting the goals and objectives of the project and provide the infrastructure needed to encourage high vehicle occupancy on the region's roads. This would indirectly relieve traffic congestion in the region, both by removing HOVs from general-purpose lanes and by encouraging SOVs to shift their modal choice from drive-alone to carpool. In addition, the project provides an opportunity to implement Transportation System Management (TSM) and Transportation Demand Management (TDM) strategies within the project area.

Surrounding Land Use/Traffic Generators (especially effect on diesel traffic)

The SR-22/I-405/I-605 interchanges are located adjacent to urbanized areas of the cities of Garden Grove, Westminster, Seal Beach, Long Beach, and the community of Rossmoor. The areas surrounding the interchanges are densely populated with residential, commercial, retail, hotel, and community facility uses. The Seal Beach Naval Weapons Station runs along the southern boundary of the project area. The western terminus of SR-22 (adjacent to the western boundary of the project area) and freeway interchanges with arterial streets within the project area provide key regional access route to and from the adjacent cities.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility:

	Table 1									
AADT - Study Base Year (1996) and Current Year (2006)										
		Study E	Base Year	(1996)	Current Year (2006)					
Freeway	Study Segment Between	Heavy Truck Heavy Total Truck Total AADT AADT AADT			Total AADT	Heavy Truck AADT	Heavy Truck % of Total AADT			
Without Pro	oject (No Build)									
SR-22	Both Directions: East of I-405 Junction	118,000	1,940	1.64%	147,000	2,417	1.64%			
I-405	Both Directions: SR-22 Junction to I-605	328,000	5,747	1.75%	390,000	4,901	1.26%			
I-605	Both Directions: North of I-405 Junction	166,000	3,355	2.02%	186,000	2,880	1.55%			

Sources: SR-22 West Orange County Connection - Final EIS/EIR (OCTA, 2003);

1996 Annual Average Daily Truck Traffic on the California State Highway System (Caltrans, 1997); and

2006 Annual Average Daily Truck Traffic on the California State Highway System (Caltrans, 2007).

Notes: AADT = Annual Average Daily Traffic; N/A = Data Not Available or Applicable; SR = State Route; I = Interstate

<u>Table 2</u>										
PM Peak Hour LOS - Study Base Year (1996) and Current Year (2006)										
		Study	Base Y	996)	Cui	rrent Yea	r (200	6)		
		General Purpose Lanes		HOV		General Purpose Lanes		HOV		
Freeway	Study Segment Between	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	
Without Pro	oject (No Build)									
EB SR-22	SR-22/I-405 to Valley View St	N/A	N/A			N/A	N/A			
WB SR-22	Valley View St to SR-22/ I- 405	N/A	N/A			N/A	N/A			
NB I-405	SR-22/I-405 to Seal Beach Blvd	0.85	Е	N/A	N/A	0.85	E	N/A	N/A	
NB I-405	Seal Beach Blvd to I-605	0.79	D	N/A	N/A	0.81	D	N/A	N/A	
SB I-405	I-605 to Seal Beach Blvd	0.79	D	N/A	N/A	0.91	Е	N/A	N/A	
NB I-605	I-405 to Katella Ave	N/A	N/A			N/A	N/A			
SB I-605	Katella Ave to I-405	0.78	D			0.75	D			

Sources: SR-22 West Orange County Connection - Final EIS/EIR (OCTA, 2003); and Parsons, 2008.

 $\underline{Notes:} \ HOV = High \ Occupancy \ Vehicle; \ LOS = Level \ of \ Service; \ V/C - Volume \ to \ Capacity \ ratio; \ N/A = Data \ Not \ Available;$

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound; SR = State Route; I = Interstate.

-- = No HOV Lane present.

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility:

<u>Table 3</u> AADT - Design Year (2020)									
		2020 W	ithout Pr Build)	oject (No	2020 W	Vith Project (Build)			
Freeway	Study Segment Between	Total AADT	Heavy Truck AADT	Heavy Truck % of Total AADT	Heavy Tru Total Truck of I		Heavy Truck % of Total AADT		
SR-22	Both Directions: East of I-405 Junction	150,100	2,462	1.64%	162,000	2,657	1.64%		
I-405	Both Directions: SR-22 Junction to I-605	370,500	4,668	1.26%	384,100	4,840	1.26%		
I-605	Both Directions: North of I-405 Junction	165,500	2,565	1.55%	175,100	2,714	1.55%		

 $\underline{Sources:} \ SR-22 \ \textit{West Orange County Connection - Final EIS/EIR} \ (OCTA, 2003); \ and \ Parsons, 2008.$

Notes: AADT = Annual Average Daily Traffic; SR = State Route; I = Interstate

<u>Table 4</u>										
Peak Hour Total Traffic Volumes and Truck % on Connectors - Design Year (2020)										
	2020 Without Project (No Build)			2020 With Project (Build)						
		'	Heavy		'					
	AM Peak	PM Peak	Truck % of	AM Peak	PM Peak	Heavy Truck				
Location	Hour	Hour	Volume	Hour	Hour	% of Volume*				
General Purpose Conn	ector									
SB I-605 to SB I-405	2,320	2,600	2.02%	2,410	2,830	2.02%				
NB I-405 to NB I-605	3,470	3,010	1.75%	3,970	3,280	1.75%				
SB I-405 to EB SR-22	4,190	6,510	1.75%	4,250	6,520	1.75%				
WB SR-22 to NB I-405	6,540	5,160	1.64%	6,700	5,470	1.64%				
Freeway-to-Freeway Di	rect HOV La	ine Connec	tor							
SB I-605 to SB I-405				720	850	0%				
NB I-405 to NB I-605				550	1,120	0%				
SB I-405 to EB SR-22			'	530	1,150	0%				
WB SR-22 to NB I-405				710	850	0%				

Sources: SR-22 West Orange County Connection - Final EIS/EIR (OCTA, 2003); and Parsons, 2008.

Notes: EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound; SR = State Route; I = Interstate;

HOV = High Occupancy Vehicle.

Also see Table 5 on next page.

^{-- =} Direct HOV Lane Connector not present under No Build condition.

^{*} Heavy (4+ axle) trucks are not allowed in HOV lanes, so the general purpose connectors would carry all heavy trucks traveling within the study area.

<u>Table 5</u> Peak Hour LOS - Design Year (2020)									
			20 With	out Proj Build)	•	2020 With Project (Build			
	Study Segment	General Purpose Lanes		ноу		General Purpose Lanes		HOV	
Freeway	Between	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
EB SR-22	SR-22/I-405 to Valley View St	0.94	E			0.94	E	0.77	D
WB SR-22	Valley View St to SR-22/ I-405	0.75	D			0.79	D	0.57	С
NB I-405	SR-22/I-405 to Seal Beach Blvd	0.86	E	0.47	С	0.90	E	0.67	С
NB I-405	Seal Beach Blvd to I-605	0.84	D	0.63	С	0.87	Е	0.75	D
SB I-405	I-605 to Seal Beach Blvd	1.08	F	0.95	Е	1.09	F	0.84	D
SB I-405	Seal Beach Blvd to SR-22/I-405	1.06	F	0.71	D	1.07	F	0.82	D
NB I-605	I-405 to Katella Ave	0.63	С			0.70	D	0.75	D
SB I-605	Katella Ave to I-405	0.70	D			0.65	С	0.57	С

Sources: SR-22 West Orange County Connection - Final EIS/EIR (OCTA, 2003); and Parsons, 2008.

Notes: HOV = High Occupancy Vehicle lanes; V/C - Volume to Capacity ratio; LOS = Level of Service;

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound; SR = State Route; I = Interstate.

^{-- =} HOV Lane not present under No Build condition.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT:

See Tables 1 and 2 above

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT:

See Tables 3, 4, and 5 above

Describe potential traffic redistribution effects of congestion relief (*impact on other facilities*): Some traffic delays can be expected during construction of the SR-22/WOCC Phase II project. However, the traffic impacts during construction are only temporary in nature and will cease upon completion of construction activities.

During the operation phase, the direct freeway-to-freeway HOV lane connectors at the SR-22/I-405 and I-405/I-605 interchanges will allow the regional HOV system to accommodate long distance travel for carpools and buses, while enabling the smooth flow of vehicles between freeways to avoid chokepoints at these major interchanges. The direct freeway-to-freeway HOV lane connectors would not add capacity to the freeways and would not cause a redistribution of local or regional traffic. Rather, the SR-22/WOCC Phase II project would improve overall traffic operations and safety within the project area, and improve regional HOV system performance.

Comments/Explanation/Details (attach additional sheets as necessary):

The addition of HOV lanes within the project area and direct freeway-to-freeway HOV lane connectors at the SR-22/I-405 and I-405/I-605 interchanges are not predicted to change the number or percentage of diesel trucks on the project area freeway segments. By definition, only high occupancy vehicles or buses would use the new HOV lanes and direct freeway-to-freeway HOV lane connectors. On California freeways, medium- and heavy-duty trucks must remain in the two right-hand lanes and would not be eligible to use the proposed HOV facilities. Express bus service provided by Orange County Transportation Authority (OCTA) would operate along the SR-22/I-405 and I-405/I-605 HOV Connectors. In keeping with SCAQMD's Rule 1192, OCTA has been in the process of phasing out its fleet of diesel transit vehicles in favor of zero emissions and ultra low emissions buses. According to the bus replacement schedules developed by OCTA, all of OCTA's diesel buses will be retired by year 2010. Based on current timetables, the SR-22/I-405 and I-405/I-605 HOV Connectors would open no sooner than 2014. Therefore, any potential hazardous effects of diesel emissions would not be worsened by the proposed direct HOV connectors.

Under the requirements of the CAAA and TEA-21, proposed transportation projects must be derived from a fiscally-constrained Regional Transportation Plan (RTP) that conforms to the State Implementation Plan (SIP). The SIP is the document that sets forth the state's strategies for achieving Federal air quality standards. Projects must also be included in a Federally-approved Transportation Improvement Program (TIP) that conforms with the SIP, and proposed projects must not cause or contribute to localized exceedances in nonattainment and maintenance areas for PM₁₀, PM_{2.5}, and other pollutants.

The SCAG Regional Council found the 2006 RTP to conform to the purposes of the SIP and adopted the 2006 RTP for the six-county SCAG region. Federal approval of the 2006 RTP was obtained in 2007. The major elements that comprise the design concept and scope of the SR-22/WOCC Phase II project are included in the 2006 RTP and are summarized as follows:

- HOV Connector, I-405 @ SR-22
- HOV Connector, I-605 @ I-405

The elements of the SR-22/WOCC Phase II project are included and modeled in the adopted 2006 Regional Transportation Improvement Program (RTIP) as **Project ID # ORA000193**, **Model # 0343**, and described as "SR-22/I-405 and I-405/I-605 Interchanges – HOV to HOV Lane Connectors". The design of the project has been included in the 2006 RTIP and Draft 2008 RTP with a construction completion date of 2014. Therefore, the SR-22/WOCC Phase II project is in conformity with the SIP and is consistent with the requirements of the Transportation Conformity Rule. The 2006 RTIP and Federal Transportation Improvement Programs (FTIP) were approved by FHWA in 2007 into the Federal Statewide Transportation Improvement Program (FSTIP). The FSTIP is the final conformity document for the TIP.

In addition, the SR-22/WOCC Phase II project is a Transportation Control Measure (TCM) as defined in the AQMP and SIP, as well as in the RTP and RTIP. TCM is a project or program that is designed to reduce air quality emissions. TCMs are referenced in the State Implementation Plan (SIP) for the applicable air basin and have priority for programming and implementation ahead of non-TCMs projects. As part of SCAG's RTP/RTIP, this project has undergone air quality conformity analysis for the South Coast Air Basin (SCAB).

Based on quantitative CO and qualitative PM₁₀ hot-spot assessments completed as part of the SR-22/WOCC FEIS/EIR, it was previously determined that the project will not cause or contribute to localized violations of NAAQS standards.

In consideration of the above information, the SR-22/WOCC Phase II project is not expected to introduce significant amounts of diesel truck traffic, would not generate additional diesel truck traffic above levels anticipated without implementation of the project, and is in compliance with the SIP/TIP. Therefore, the project is not considered a project of significant concern per the definition contained within 40 CFR 93.1.126(b)(1).